- 17. An isolated protein comprising an amino acid sequence at least 90% identical to amino acids 1 to 142 of SEQ ID NO:2.
- 18. The protein of claim 17, comprising an amino acid sequence at least 95% identical to amino acids 1 to 142 of SEQ ID NO:2.
 - 19. The protein of claim 18, comprising amino acids 1 to 142 of SEQ ID NO:2.
- 20. The protein of claim 17, comprising an amino acid sequence at least 90% identical to amino acids -19 to 142 of SEQ ID NO:2.
- 21. The protein of claim 20, comprising an amino acid sequence at least 95% identical to amino acids -19 to 142 of SEQ ID NO:2.
 - 22. The protein of claim 21, comprising amino acids -19 to 142 of SEQ ID NO:2.
- 23. The protein of claim 20, comprising an amino acid sequence at least 90% identical to amino acids -20 to 142 of SEQ ID NO:2.
- 24. The protein of claim 23, comprising an amino acid sequence at least 95% identical to amino acids -20 to 142 of SEQ ID NO:2.
 - 25. The protein of claim 24, comprising amino acids -20 to 142 of SEQ ID NO:2.
 - 26. The protein of claim 17, which is produced by a recombinant host cell.
 - 27. The protein of claim 17, which comprises a heterologous protein.

Filed: December 19, 1997)

- 28. A composition comprising the protein of claim 17 and a pharmaceutically acceptable carrier.
 - 29. A method of producing the protein of claim 17, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and
 - (b) recovering the protein from the cell culture.
 - 30. A protein produced by a method comprising:
 - (a) expressing the protein of claim 17 in a cell; and
 - (b) recovering said protein.
- 31. An isolated protein comprising, except for one to five conservative amino acid substitutions, an amino acid sequence identical to amino acids 1 to 142 of SEQ ID NO:2.
- 32. The protein of claim 31 comprising, except for one to five conservative amino acid substitutions, an amino acid sequence identical to amino acids -19 to 142 of SEQ ID NO:2.
- 33. The protein of claim 32 comprising, except for one to five conservative amino acid substitutions, an amino acid sequence identical to amino acids -20 to 142 of SEQ ID NO:2.
 - 34. The protein of claim 31, which is produced by a recombinant host cell.
 - 35. The protein of claim 31, which comprises a heterologous protein.
- 36. A composition comprising the protein of claim 31 and a pharmaceutically acceptable carrier.
 - 37. A method of producing the protein of claim 31, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and

- (b) recovering the protein from the cell culture.
- 38. A protein produced by a method comprising:
 - (a) expressing the protein of claim 31 in a cell; and
 - (b) recovering said protein.
- 39. An isolated protein, comprising an amino acid sequence at least 90% identical to the mature amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825.
- 40. The protein of claim 39, comprising an amino acid sequence at least 95% identical to the mature amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825.
- 41. The protein of claim 40, comprising the mature amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825.
- 42. The protein of claim 39, comprising an amino acid sequence at least 90% identical to the complete amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825.
- 43. The protein of claim 42, comprising an amino acid sequence at least 95% identical to the complete amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825.
- 44. The protein of claim 43, comprising the complete amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825.
 - 45. The protein of claim 39, which is produced by a recombinant host cell.
 - 46. The protein of claim 39, which comprises a heterologous protein.

- 47. A composition comprising the protein of claim 39 and a pharmaceutically acceptable carrier.
 - 48. A method of producing the protein of claim 39, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and
 - (b) recovering the protein from the cell culture.
 - 49. A protein produced by a method comprising:
 - (a) expressing the protein of claim 39 in a cell; and
 - (b) recovering said protein.
- 50. An isolated protein comprising, except for one to five conservative amino acid substitutions, an amino acid sequence identical to the mature amino acid sequence encoded by the cDNA in ATCC Deposit NO. 97825.
 - 51. The protein of claim 50, which is produced by a recombinant host cell.
 - 52. The protein of claim 50, which comprises a heterologous protein.
- 53. A composition comprising the protein of claim 50 and a pharmaceutically acceptable carrier.
 - 54. A method of producing the protein of claim 50, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and
 - (b) recovering the protein from the cell culture.
 - 55. A protein produced by a method comprising:
 - (a) expressing the protein of claim 50 in a cell; and
 - (b) recovering said protein.

- 56. An isolated protein comprising, except for one to five conservative amino acid substitutions, an amino acid sequence identical to the complete amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825.
 - 57. The protein of claim 56, which is produced by a recombinant host cell.
 - 58. The protein of claim 56, which comprises a heterologous protein.
- 59. A composition comprising the protein of claim 56 and a pharmaceutically acceptable carrier.
 - 60. A method of producing the protein of claim 56, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and
 - (b) recovering the protein from the cell culture.
 - 61. A protein produced by a method comprising:
 - (a) expressing the protein of claim 56 in a cell; and
 - (b) recovering said protein.
- 62. An isolated protein comprising a fragment of at least 30 contiguous amino acids of SEQ ID NO:2, wherein said fragment comprises an amino acid sequence selected from the group consisting of:
 - (a) amino acids -4 to 9 of SEQ ID NO:2;
 - (b) amino acids 13 to 19 of SEQ ID NO:2;
 - (c) amino acids 23 to 32 of SEQ ID NO:2;
 - (d) amino acids 36 to 47 of SEQ ID NO:2;
 - (e) amino acids 54 to 63 of SEQ ID NO:2;
 - (f) amino acids 70 to 74 of SEQ ID NO:2;
 - (g) amino acids 90 to 100 of SEQ ID NO:2;

- (h) amino acids 105 to 119 of SEQ ID NO:2; and
- (i) amino acids 125 to 132 of SEQ ID NO:2.
- 63. The protein of claim 62, wherein said fragment comprises amino acid sequence (a).
- 64. The protein of claim 62, wherein said fragment comprises amino acid sequence (b).
- 65. The protein of claim 62, wherein said fragment comprises amino acid sequence (c).
- 66. The protein of claim 62, wherein said fragment comprises amino acid sequence (d).
- 67. The protein of claim 62, wherein said fragment comprises amino acid sequence (e).
- 68. The protein of claim 62, wherein said fragment comprises amino acid sequence (f).
- 69. The protein of claim 62, wherein said fragment comprises amino acid sequence (g).
- 70. The protein of claim 62, wherein said fragment comprises amino acid sequence (h).
- 71. The protein of claim 62, wherein said fragment comprises amino acid sequence (i).
- 72. The protein of claim 62, which is produced by a recombinant host cell.
- 73. The protein of claim 62, which comprises a heterologous protein.
- 74. A composition comprising the protein of claim 62 and a pharmaceutically acceptable carrier.
 - 75. A method of producing the protein of claim 62, comprising:

- (a) culturing a host cell under conditions suitable to produce the protein; and
- (b) recovering the protein from the cell culture.
- 76. A protein produced by a method comprising:
 - (a) expressing the protein of claim 62 in a cell; and
 - (b) recovering said protein.
- 77. An isolated protein comprising 30 contiguous amino acids of SEQ ID NO:2.
- 78. The protein of claim 77, comprising 50 contiguous amino acids of SEQ ID NO:2.
- 79. The protein of claim 77, which is produced by a recombinant host cell.
- 80. The protein of claim 77, which comprises a heterologous protein.
- 81. A composition comprising the protein of claim 77 and a pharmaceutically acceptable carrier.
 - 82. A method of producing the protein of claim 77, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and
 - (b) recovering the protein from the cell culture.
 - 83. A protein produced by a method comprising:
 - (a) expressing the protein of claim 77 in a cell; and
 - (b) recovering said protein.
- 84. An isolated protein comprising an amino acid sequence at least 90% identical to a fragment of SEQ ID NO:2, wherein said fragment is at least 30 amino acids in length.

Filed: December 19, 1997)

- 85. The protein of claim 84, comprising an amino acid sequence at least 95% identical to said fragment.
- The protein of claim 85, comprising an amino acid sequence identical to said 86. fragment.
 - 87. The protein of claim 84, wherein said fragment is at least 50 amino acids in length.
 - 88. The protein of claim 84, which is produced by a recombinant host cell.
 - 89. The protein of claim 84, which comprises a heterologous protein.
- A composition comprising the protein of claim 84 and a pharmaceutically acceptable 90. carrier.
 - 91. A method of producing the protein of claim 84, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and
 - recovering the protein from the cell culture. (b)
 - 92. A protein produced by a method comprising:
 - expressing the protein of claim 84 in a cell; and (a)
 - (b) recovering said protein.
- 93. An isolated protein comprising an amino acid sequence at least 90% identical to a fragment of the amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825, wherein said fragment is at least 30 amino acids in length.
- 94. The protein of claim 93, comprising an amino acid sequence at least 95% identical to said fragment.

- 11 -

- 95. The protein of claim 94, comprising an amino acid sequence identical to said fragment.
 - 96. The protein of claim 93, wherein said fragment is at least 50 amino acids in length.
 - 97. The protein of claim 93, which is produced by a recombinant host cell.
 - 98. The protein of claim 93, which comprises a heterologous protein.
- 99. A composition comprising the protein of claim 93 and a pharmaceutically acceptable carrier.
 - 100. A method of producing the protein of claim 93, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and
 - (b) recovering the protein from the cell culture.
 - 101. A protein produced by a method comprising:
 - (a) expressing the protein of claim 93 in a cell; and
 - (b) recovering said protein.
- 102. An isolated protein comprising an amino acid sequence encoded by a polynucleotide which hybridizes to a nucleic acid encoding SEQ ID NO:2, or the complement thereof; or a nucleic acid encoded by the cDNA in ATCC Deposit No. 97825, or the complement thereof, under conditions comprising:
 - (a) incubating overnight at 42° C in a solution consisting of 50% formamide, 5X SSC, 50 mM sodium phosphate (pH 7.6), 5x Denhardt's solution. 10% dextran sulfate, and 20μg/ml denatured, sheared salmon sperm DNA; and
 - (b) washing at 65° C in a solution consisting of 0.1x SSC.

- 103. The protein of claim 102, wherein said polynucleotide hybridizes to a nucleic acid encoding SEQ ID NO:2, or the complement thereof, under said conditions.
- 104. The protein of claim 102, wherein said polynucleotide hybridizes to a nucleic acid encoded by the cDNA in ATCC Deposit No. 97825, or the complement thereof, under said conditions.
 - 105. The protein of claim 102, which is produced by a recombinant host cell.
 - 106. The protein of claim 102, which comprises a heterologous protein.
- 107. A composition comprising the protein of claim 102 and a pharmaceutically acceptable carrier.
 - 108. A method of producing the protein of claim 102, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and
 - (b) recovering the protein from the cell culture.
 - 109. A protein produced by a method comprising:
 - (a) expressing the protein of claim 102 in a cell; and
 - (b) recovering said protein.
- 110. An isolated protein comprising 30 contiguous amino acids of the complete amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825.
- 111. The protein of claim 110, comprising 50 contiguous amino acids of the complete amino acid sequence encoded by the cDNA in ATCC Deposit No. 97825.
 - 112. The protein of claim 110, which is produced by a recombinant host cell.

- 113. The protein of claim 110, which comprises a heterologous protein.
- 114. A composition comprising the protein of claim 110 and a pharmaceutically acceptable carrier.
 - 115. A method of producing the protein of claim 110, comprising:
 - (a) culturing a host cell under conditions suitable to produce the protein; and
 - (b) recovering the protein from the cell culture.
 - 116. A protein produced by a method comprising:
 - (a) expressing the protein of claim 110 in a cell; and
 - (b) recovering said protein.